

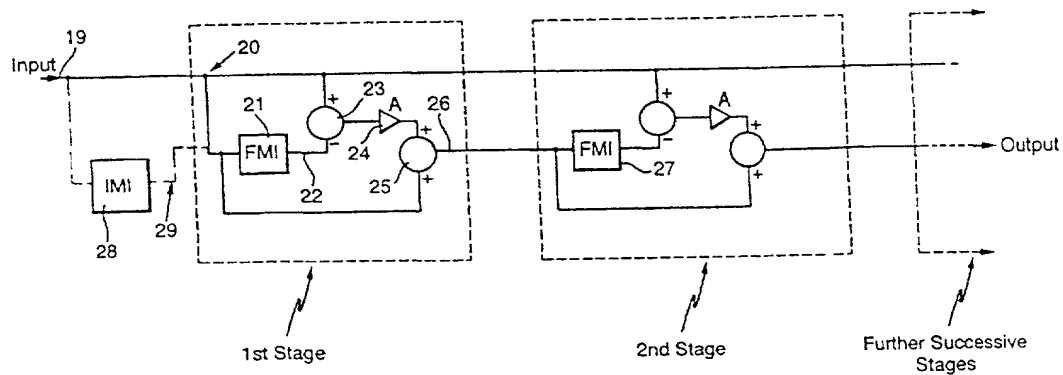
PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : H04L 27/36, H03F 1/32		A1	(11) International Publication Number: WO 00/25495
			(43) International Publication Date: 4 May 2000 (04 05 00)
(21) International Application Number: PCT/GB99/03425 (22) International Filing Date: 22 October 1999 (22.10.99) (30) Priority Data: 9823190.5 23 October 1998 (23.10.98) GB (71) Applicant (for all designated States except US): TANDBERG TELEVISION LIMITED [GB/GB]; 35 Basinghall Street, London EC2V 5DB (GB). (72) Inventors; and (75) Inventors/Applicants (for US only): BEECH, Brian, Herbert [GB/GB]; 10 Darlington Road, Bishopstoke, Eastleigh, Hampshire SO50 0NF (GB). EDWARDS, David [GB/GB]; 36 Chatsworth Road, Boyatt Wood, Eastleigh, Hampshire SO50 4PE (GB). (74) Common Representative: TANDBERG TELEVISION LIMITED; Anderson, Angela, Mary, Gamma House, Enterprise Road, Chilworth, Hampshire SO16 7NS (GB).		(81) Designated States: JP, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report</i>	

(54) Title: METHOD AND APPARATUS FOR REDUCING DISTORTION OF DIGITAL DATA



(57) Abstract

The invention relates to a method and apparatus for reducing the effects distortion experienced by a modulated signal carrying digital data during passage across a transmission link, and is particularly suited to satellite transmission links and especially those satellite transmission links intended for transmission of signals modulated in accordance with higher order modulation schemes. The invention provides method and apparatus capable of pre-correction of both static and dynamic distortion experienced by modulated signals during transmission. A method of pre-distortion a signal, modulated to carry symbols representative of digital data, so as to offset later distortion of the signal during transmission across a transmission link, the method comprising passing the signal through a cascade of pre-distorting stages, each of which generates an approximation of the required pre-distortion, each successive stage receiving the approximation from the preceding stage so that the errors in successive approximations converge. Apparatus for pre-distorting a signal, modulated to carry symbols representative of digital data, so as to offset later distortion of the signal during transmission across a transmission link, the apparatus comprising a cascade of pre-distorting stages, each of which generates an approximation of the required pre-distortion, each successive stage receiving the approximation from the preceding stage so that the errors in successive approximations converge.

EXPRESS MAIL LABEL
NO.: EL 728212401 US